

Chapter Five | Compliance and Stewardship

Construction activities at a Wal-Mart site in Aurora, Colorado.

In 2002, Region 8 conducted inspections at Wal-Mart construction sites in Colorado, Utah and South Dakota, and identified a number of Clean Water Act storm-water violations that became the foundation of a national case against 24 Wal-Mart sites located in nine states. This landmark case was settled in 2004 with Wal-Mart agreeing to pay the largest storm-water penalty ever — \$3.1 million — and implement a compliance program estimated at \$62 million to prevent future violations. Because of these actions, EPA protected surface waters in rivers, streams and lakes and improved their use for fishing, drinking and recreation.

Storm-water requirements are designed to prevent the runoff of dirt and other contaminants from construction projects from polluting waterways. This runoff can carry high levels of pollutants such as sediment, oil and grease, suspended solids, nutrients and heavy metals. This problem is common in the United States. It is estimated that urban storm-water runoff contributes to 13 percent of the nation's impaired rivers and streams; 21 percent of impaired lakes; 55 percent of impaired ocean shorelines; and 46 percent of impaired estuaries.



Introduction

Environmental laws and regulations designed to protect human health and the environment can achieve their purpose only when companies, facilities and individuals comply with them. To secure and maintain compliance by the maximum number of regulated entities, EPA works collaboratively with partners to provide compliance assistance to promote understanding of environmental regulations; offer incentives that encourage facilities to identify violations; monitor compliance through inspections; and conduct civil and criminal enforcement actions to correct violations and deter future noncompliance.

Providing Compliance Assistance to the regulated community

EPA's first strategy in making sure environmental rules and regulations are obeyed is through compliance assistance. Here, the goal is to raise awareness and provide outreach that helps governments, large and small businesses and individuals comply with the law. In 2004, EPA Region 8 reached more than 12,000 regulated entities with education and assistance on how to comply with various laws and regulations. This included more than 100 workshops, 1,000 compliance assistance site visits and thousands of phone calls and interviews.



Helping facilities comply with oil spill prevention regulations

One ongoing effort is Region 8's work to improve compliance with the Spill Prevention Control and Countermeasures regulation of the Oil Pollution Act. SPCC regulations require facilities that handle and store large volumes of oil and oil-based products to develop management plans and install measures that prevent oil from spilling and contaminating surface waters. The regulations, which require secondary containment around large oil tanks and containers, overfill protection, security measures for facilities and employee training, apply to thousands of facilities in Region 8. These include places like oil production and disposal facilities, oil distributors, heating oil operations, farms, power generators, construction companies, mining operations, automotive facilities and other businesses.

SPCC rules are important — as little as a pint of oil can contaminate an entire acre of surface water and even seemingly small spills can have dramatic consequences. In 2003, for example, a 100-gallon spill of diesel fuel into the Red River (from a facility not in compliance with SPCC regulations) shut down the drinking water intakes in Moorhead City, Minnesota, and Fargo, North Dakota, for a day.

In the late 1990s, Region 8 became concerned about high noncompliance rates and began to conduct workshops, targeted outreach with industry groups and newspaper announcements about the importance of SPCC regulations and what it takes to comply. These efforts focused on geographic areas and were followed by inspections.

Since 2001, EPA has conducted this strategy in all six of our states and is seeing compliance rates improve. While initial inspections revealed major violations at nearly 25 percent of facilities inspected, that number has dropped to less than 10 percent in recent years. The reasons for this success are many. Awareness of the SPCC regulations can vary greatly between geographic areas, and over time Region 8 has become more effective at getting the word out to state agencies, trade associations and individual businesses. Region 8 has also effectively used expedited settlements and reduced penalties to get facilities with minor violations into compliance quickly. As these rates improve, more and more oil is being safely managed, reducing the potential for accidents to impact local waters.

Enforcing environmental laws

EPA also vigorously pursues those who violate the law. Region 8 and our state partners use inspections, civil and criminal investigations, administrative actions and civil and criminal judicial enforcement to identify violators and return them to compliance as quickly as possible. These actions improve environmental quality, assure a level playing field for all regulated entities and provide an important incentive for compliance.

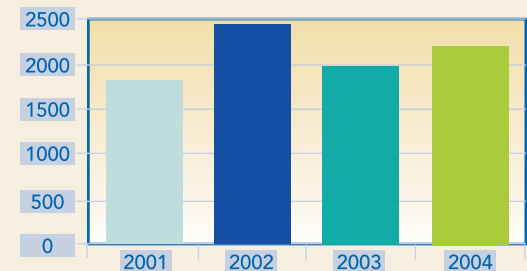
In 2004, Region 8 conducted more than 2,100 inspections, issued 88 administrative compliance orders that forced companies to take measures to comply with the law, issued 99 administrative penalty orders for a total of more than \$2 million, and collected more than \$103 million in injunctive relief that went towards remediating environmental issues associated with noncompliance.

Cutting air emissions by 50 percent at Rocky Mountain Steel Mills

EPA's settlement with Rocky Mountain Steel Mills in Pueblo, Colorado, is a recent highlight. This case involved violations of Clean Air Act rules that prevent facilities from increasing air emissions and contributing to the deterioration of air quality (Prevention of Significant Deterioration rules) and performance standards for electric arc furnaces.

Between 1992 and 2002, RMSM made plant modifications and operational changes to increase production capacity from 800,000 tons to 1,400,000 tons of steel per year. These changes led to significant increases in emissions of nitrogen oxides, sulfur dioxide, particulate matter (including lead) and carbon monoxide from the plant. In addition, EPA documented hundreds of violations of opacity limits (a measure of how thick smoke is) which indicated problems with particulate matter controls.

EPA Region 8 Inspections



EPA evaluates the regulated community to determine compliance with laws, regulations, permit conditions and settlement agreements and whether threats to human health or the environment exist. In 2004, Region 8 staff conducted more than 2,100 inspections across 17 major environmental program areas, most related to programs that EPA implements directly in states and tribal lands. Nearly half of these inspections were associated with the Underground Injection Control and Public Water System Supervision programs under the Safe Drinking Water Act.

Region 8 worked with the Department of Justice and the State of Colorado to bring suit against RMSM in 2001. After two years of negotiations, EPA and RMSM signed a consent decree in 2003 requiring the facility to acquire the necessary permits, invest \$25 million to modernize its facility and pay a \$450,000 penalty. The largest investment is improving the mill's electric arc furnace and emission control equipment. In addition, the company is spending more than \$1 million to reduce nitrogen oxide emissions from the mill's reheat furnaces. RMSM's use of "ultra low-NOx" burners will establish a new standard for steel-making facilities.

In upcoming years, the settlement will cut air pollution from the mill in half. Expected annual reductions of particulate matter emissions will be about 100 tons, including 800 pounds of lead. In addition, 750 tons of carbon monoxide, 200 tons of sulfur dioxide and 130 tons of nitrogen oxide emissions will be eliminated annually. These pollutants contribute to respiratory disorders and reduced lung capacity, and many can adversely affect the heart, brain and nervous system. They also damage ecosystems and reduce visibility.

As part of the settlement, RMSM is also spending \$435,000 on environmental health projects in the local community. Four of these projects focus on education, improved medical care and case management for people with asthma. A fifth is providing lead-hazard education and lead remediation in low-income neighborhoods.

Providing safe drinking water on the Fort Peck Indian Reservation

The East Poplar Oil Field is located on the Fort Peck Indian Reservation, home to the Assiniboine and Sioux Tribes in northeastern Montana. The field, active since 1952, covers approximately 50 square miles. Throughout the field's history, numerous companies have owned and operated 115 wells and about 45 production wells and four waste brine disposal wells remain active today. Oil wells typically produce large volumes of highly saline wastewater along with byproducts such as benzene. This wastewater is often disposed of on the surface or re-injected into the subsurface.

While productive, the East Poplar field is as a classic

example of what can happen when oil development occurs near a drinking-water source. The East Poplar oil deposit lies directly below a shallow aquifer that serves as the sole source of drinking water for the area, including portions of the 6,000 residents of the Fort Peck Reservation as well as the City of Poplar, where an estimated 3,500 people use the Public Water Supply System and 20 home sites use private wells.

After years of drilling, residents began to make a connection between the murky water that stained their tubs and basins and the East Poplar field. In 1997 the U.S. Geological Survey conducted a study and identified contamination to cover at least 12 square miles, affecting an estimated nine to 60 billion gallons of aquifer water. The contamination includes total dissolved solids (salt) concentrations as high as 91,100 mg/l (180 times EPA's secondary drinking water standards) and benzene concentrations as high as 0.078 mg/l (15 times primary drinking water standards).

In 1999, EPA issued an Emergency Administrative Order under the Safe Drinking Water Act against six current and previous oil companies, requiring delivery of bottled drinking water to 20 home sites. EPA also issued three subsequent orders to ensure that the responsible companies would stop the on-going contamination and provide affected residents with a long-term drinking source.

In July 2004, EPA and the companies reached a final agreement that achieved a long-term solution for the Fort Peck Reservation and the City of Poplar, securing a safe drinking-water source for those affected by the contamination. Under the agreement, the oil companies agreed to construct a drinking water pipeline to supply 15 contaminated home sites, monitor water at five homes and 11 monitoring wells and hold a public meeting to address community issues. The construction of a drinking water pipeline will cost approximately \$1.2 million and the total costs of the remaining compliance actions more than \$4 million.

Crime and punishment at a Montana phosphorous plant

EPA also pursues criminal cases against those who willingly break the law. In August 1999, EPA and the State of Montana began an investigation of suspected hazardous waste violations at a phosphorous production plant in Silver Bow, Montana. Rhodia, Inc., had produced phosphorous used for fertilizers, pesticides and food-grade phosphoric acid at the plant since 1986.



Photo: Nathan Wiser

Charles Four Bear, member of the Assiniboine and Sioux Tribes at Fort Peck, Montana, holds a glass of water from his tap.

In May of 2000, a search warrant revealed large amounts of improperly stored elemental phosphorous, including a 400,000-gallon underground tank leaking into nearby groundwater. During the search, 50,000 documents were seized, samples of waste streams were collected and a video of phosphorous waste spontaneously igniting was taken. Elemental phosphorous, which does not occur in nature, is highly toxic and ignites when exposed to air. Samples of the waste burned at temperatures close to 1,000 degrees Fahrenheit and emitted highly toxic concentrations of phosphine gas.

During the investigation, Rhodia was uncooperative and provided false statements and information about the plant's operation and in 2003 the Assistant U.S. Attorney General and the Montana U.S. Attorney determined that the case warranted criminal prosecution.

Facing an indictment on Resource Conservation and Recovery Act violations and Clean Water Act charges, Rhodia signed a plea agreement and a corrective action order. Under this agreement, the defendant pled guilty on January 14, 2004 to two felony counts of illegal storage of hazardous wastes and agreed to conduct facility-wide corrective action and to pay a penalty of \$18 million — the second largest RCRA criminal penalty in the nation to date and the largest criminal penalty in Montana history. Rhodia also agreed to conduct facility-wide clean up, an effort that could cost \$70 million and will remove tens of millions of pounds of hazardous contamination that would otherwise have been left behind by the company.

Making investments in communities through Supplemental Environmental Projects

EPA uses Supplemental Environmental Projects as a way to secure investments in environmental quality and human health as part of enforcement settlements. SEPs allow violators to support projects

that improve the local community. They can come in all shapes and colors, from environmental education and children's health projects to developing renewable energy resources. In 2004, the total value of supplemental environmental projects in Region 8 exceeded \$1.7 million.

A refinery makes good in Commerce City, Colorado

In 2000, as part of a national refinery initiative under the Clean Air Act, EPA contacted Conoco, Inc. regarding violations at its refinery in Commerce City, Colorado. In the spirit of cooperation, Conoco quickly resolved the allegations by agreeing to make changes to the facility and paying penalties.

As part of a settlement signed in 2002, Conoco agreed to SEPs at the refinery and the local community totaling more than \$2 million. After reviewing more than 40 proposed community projects, the State of Colorado and EPA approved a proposal that Conoco invest more than \$500,000 of the SEP amount on 20 environmental projects in the Denver and Commerce City area. This money is going to a variety of nonprofit groups to deliver environmental education, health and pollution prevention programs.

In 2003, Suncor purchased the Commerce City refinery and agreed to complete these SEPs. Today, the company is sponsoring an impressive host of community-based programs that are improving human health and the environment. These include home energy efficiency improvement projects; lead inspection and abatement activities in at-risk homes; asthma education programs; retrofits in diesel trucks and school buses to reduce vehicle emissions; trails, parks and open space development; air quality analysis in targeted neighborhoods; science curriculum development in a local school district; environmental education projects and field trip programs; school and community recycling programs; and water conservation programs.

According to Constance Walker, Suncor's Director of Environment and Regulatory Affairs,



Photo courtesy: The Breathe Better Foundation of Colorado Allergy and Asthma Centers, P.C.

The Breathe Better Bus, Denver, Colorado. One example of a Supplemental Environmental Project in action, this 40-foot natural gas-powered bus is a mobile educational center that visits schools, health clinics, community events and corporate health fairs. Sponsored by the Breathe Better Foundation and supported in part by a Suncor SEP, the bus has six interactive learning stations that focus on the importance of lung health and asthma. The bus has visited more than 20,000 children and 3,000 adults.



Another Suncor Supplemental Environmental Project, the Groundwork Denver project. This program works with community groups and Denver Urban Gardens to turn neglected lots into gardens.

PEOPLE IN ACTION

People in Action: Xanterra's Chris Lane

As the nation's largest park and resort management company, Xanterra Parks & Resorts serves more than 17 million guests annually at lodges, restaurants and retail operations at nine national parks, eight state parks and two privately owned resorts.

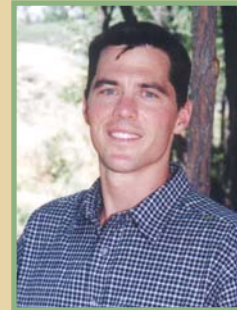
Many of Xanterra's properties, including facilities at Bryce Canyon, Mt. Rushmore, Grand Canyon and Zion National Parks in Region 8, are enrolled in EPA's Performance Track, a program where members meet rigorous criteria for energy and water efficiency, recycling, pollution prevention and other measures that go far beyond compliance with regulatory requirements.

One of the faces behind Xanterra's success is Chris Lane, Director of Senior Environmental Affairs. Chris explains that the company is committed to being an environmental leader. "While corporations affect our environment," Lane says, "they also have the ability to repair and improve it. More and more, successful businesses will need to integrate economic, ecologic and human systems. Xanterra has found that treading softly in the places where we operate can save us money and enhance the quality of the service we provide."

All of Xanterra's facilities have environmental management systems that focus on reducing resource use and pollution. These EMSs are ISO 14001-certified, meaning they meet rigorous standards that ensure continual improvement and regulatory compliance. Many of the company's lodges, for example, have switched heating systems from oil to propane, a step that has increased efficiency by 23 percent and reduced carbon monoxide emissions by 80 times. Transportation is another example. Xanterra's fleet includes six hybrid electric vehicles, four dual-fuel propane shuttles, 52 electric vehicles, 79 four-stroke snowmobiles and many more vehicles running on a 20 percent blend of biodiesel. Xanterra also uses pollution-prevention practices to maintain these vehicles, including using non-hazardous solvents for parts cleaning, recycling used oil, capping old tires, and recycling antifreeze, spent paint solvents, car batteries, oil filters and scrap metal.

The company also has exceptional water-use and waste-reduction programs such as water-efficient landscaping, fixtures and linen reuse programs. To save water at arid Zion National Park, the company recently improved landscaping and irrigation practices, saving more than nine million gallons of water in one season.

The company has set rigorous long-term goals in its 2015 Environmental Vision, including a 30 percent reduction in greenhouse gas emissions, an internal Corporate Average Fuel Economy standard of 35 mpg, a 50 percent waste diversion rate and a seven percent renewable energy usage rate.



Chris Lane



The Bryce Canyon Lodge, one of Xanterra's Performance Track facilities. The Lodge has committed to reducing energy usage from 1985 levels by 30 percent by 2005 and greenhouse gas emissions from 1990 levels by 30 percent by 2010.

these diverse projects offer the company a way to interact with and invest in the community. "Suncor believes in investing in the communities in which it operates, particularly projects focused on education, health and the environment," she said. "Fulfilling the SEP obligations is just one of several ways we have supported the community financially and through environmental improvements. The projects are an ideal way for Suncor to start to build relationships."

Recognizing exemplary environmental performance

Not all companies need the law as an incentive to improve environmental performance. Many make finding new ways to prevent pollution and minimize the impacts of their activities a central part of the way they do business. These companies set a standard for others to emulate. Region 8 assists and recognizes those regulated entities that go beyond compliance.

Brewing up green in Fort Collins, Colorado

This summer, EPA recognized the New Belgium Brewery with an Achievement Award for its exemplary commitment to environmental stewardship. The company's long history of excellence includes continuously analyzing and refitting operations to minimize resource consumption and maximize energy efficiency and recycling.

By far the most environmentally progressive feature at New Belgium is the recently completed Process Water Treatment Plant. This multimillion dollar investment captures biogas from



Region 8 Administrator Robbie Roberts presents New Belgium cofounder, Kim Jordan, with an EPA Environmental Achievement Award. New Belgium is the third largest brewery in Colorado and 12th largest in the nation.

wastewater and uses it to generate electricity for the brewery. The plant generates and harnesses enough methane to run a co-generator for an average of five hours per day, meeting about 10 percent of the brewery's overall power demand.

The plant also treats the brewery's wastewater to a level cleaner than required; recaptures water for reuse in brewery processes; and uses only gravity to move water through its treatment ponds. Over time, the plant will pay for itself with the savings from these measures.

New Belgium's status as an environmental role model doesn't end there. The brewery was the first in the United States to use 100 percent wind-generated power and employs extensive reuse and recycling programs at its production facility and offices. For example, brewing by-products such as grain and slurry are stored and sold as cattle feed instead of disposed as waste. The brewery also uses biodiesel fuel in local delivery trucks and is currently the nation's largest private, non-textile consumer of organic cotton.

RESULTS IN FOCUS

Adding up the environmental benefits of enforcement and compliance activities

Region 8's enforcement and compliance activities yield substantial environmental results. In fact, more than \$9 out of every \$10 collected through Region 8 enforcement actions goes to fund activities that provide a direct environmental benefit. In 2004 alone, Region 8 secured more than \$106 million in injunctive relief and supplemental environmental projects. Collectively, these actions led to the following results:

- 1.25 million people protected through Public Water Supply compliance and enforcement efforts
- 70 acres of wetlands protected by restoration and/or removal of fill material
- 172,000 cubic yards of soil contaminants reduced and/or removed — enough soil to fill a football field to a height of nearly 100 feet!
- 941,000 gallons of groundwater treated to meet environmental standards
- 2,500 tons/year of air-pollutant releases prevented from affecting sensitive populations
- 3.5 million gallons of fuels managed in a way that prevents their release to the waters of the United States, and 90,000 gallons of releases subject to the Oil Pollution Act cleaned up
- 179,000 pounds of water pollution prevented from reaching waters as part of the Concentrated Animal Feedlot Operations program
- 9 million pounds of sediment prevented from reaching surface waters as part of the Storm Water program
- 1,000 farm workers protected as a result of Worker Protection Standard actions

